I do with the bowel? It was adherent to the posterior surface of the sac, it was badly nipped, though not hopelessly disorganized, and, to all appearance, the patient was "past praying for." I broke up the adhesions carefully, and returned the strangulated portion of intestine entirely within the cavity, in the hope that if the patient survived, the natural warmth and moisture of the parts would favour a return of full vitality to the partially gangrenous bowel, and if artificial anus should ensue, the angle formed in the gut would be more obtuse, and the spur, or eperon, might not be so long or acute as to interfere with spontaneous healing, and the integrity of the bowel, without an operation. The returned portion of intestine was left entirely within the abdomen, but in contact with the crural opening. A compress and bandages were applied, and the patient put to bed, and a half a tumbler of brandy administered. She immediately rallied, and, on the following morning, took a light breakfast, with manifest relish. I gave no medicine of any kind whatever, but left the case entirely to nature. There was no motion of the bowels, nor any discharge from the wound, until the fourth day, when a thin watery discharge took place from the latter; and on the sixth day, the contents of the bowels escaped freely from the orifice, establishing an artificial anus. This continued to discharge, and the lower portion of the bowel remained entirely inactive, until, at the end of the fourth week, there was a natural stool per anum, without the administration of either laxative or enema, and the character of the dejection did not differ in appearance from an ordinary passage in health. The opening in the groin was kept closed by a slight compress and bandage, and the patient sat or walked about the house with ease and comfort, except when there would be a slight discharge from the artificial opening, consisting, in part, of the contents of the bowel, till, at the end of the tenth week after the operation, the wound entirely closed, and the patient's health is quite as good as previous to the operation. She wears a soft, hollow, padded truss, more as a measure of precaution than any absolute necessity. In this operation, the lateness of its performance, and its seeming hopelessness, make it one of interest, while the breaking up of the adhesions, and return of the strangulated intestine entirely within the cavity of the abdomen, but in apposition with the femoral opening, may not be deemed altogether an orthodox method of forming artificial anus. Nor, indeed, do I either justify or recommend it to others, but simply state it fairly, as one instance of its kind, to take its place in the statistics of the history and surgery of hernia.

ART. XII .- Case of Hamatocele. By John H. Packard, M. D.

NOTWITHSTANDING the voluminous writings on surgical subjects which have been presented to the profession, cases are constantly met with in prac-

tice, differing in some way from all published descriptions, so that their diagnosis, prognosis, and treatment may either or all of them become matters of doubt and perplexity. These difficulties do not necessarily imply unusual complications; a case may be puzzling from its very simplicity, or rather from the absence of phenomena commonly observed in its analogues; and it will readily be seen that the rarer any form of disease, the more apt will it be to deviate from the so-called standard.

The case which the above remarks are designed to introduce, was one of pure hæmatocele; which is of very rare occurrence except as the result of injury from without.

J. M., set. 40, a shop-keeper, applied to me Feb. 19, 1858, to be treated for a very great enlargement of the scrotum and its contents on the right side. The skin was very red, tense and firm; the part somewhat painful on pressure; the swelling extended towards the left side beyond the raphé of the scrotum, pushing before it the apparently healthy left testicle. The skin along the course of the cord was a little puffy; the testicle could be plainly felt at the posterior part of the swelling, which was entirely destitute of translucency.

He said that the right side of his scrotum had always been somewhat larger than the other, but not more than he thought it ought to be; that it had never given him the slightest uncasiness until five days before; and that at that time he was sitting on a bench in the open air, when he felt a sudden pain in the part, which then began to swell. No trace of gonorrhen could be detected; and I was led to think that the case was one of hydrocele, with sudden increase of the effusion, and inflammation of the investing tissues. He was purged, dieted, and ordered to remain in bed (which he did not do). Lead-water and laudauum were applied locally. Next day the dressing was changed to a bread-and-milk poultice; and this was continued throughout.

March 4. The swelling of the skin, fascia, &c., was much reduced; fluctuation very distinct. Adopting the diagnosis above mentioned, I introduced a trocar and canula; but only about f3ss of blood escaped, and no pressure could induce any further emptying of the sac, into the cavity of which the instrument had evidently passed; the latter moved freely in every direction when pushed in a distance of full two inches; it was withdrawn, and the poultice reapplied.

No irritation of any kind followed this operation, and next day the swelling was freely painted with tineture of iodine, which painting was repeated daily for several days.

12th. The trocar and canula were again introduced; this time the canula was kept clear by means of a probe, and about fziv of partially coagulated blood was discharged. The parietes of the sac were evidently thickened and roughened; the clots were of various sizes, and quite rough in texture. Under the microscope these clots seemed made up of dense fibrillæ, with an appear-

ance of very abundant but indistinct nuclei. The poultice was reapplied, and next day the sac seemed to have filled up again somewhat.

The swelling gradually grew smaller, but continued very tense.

19th. I tapped him again, withdrawing about f3j of bloody liquid, containing a few small clots. The testicle seemed to me somewhat enlarged, and its envelops a good deal thickened. Directed him to walk about.

An unintermitting decrease in the swelling new ensued, and on April 7, forty-seven days from the commencement of the treatment, and fifty-two from that of the disorder, I could not, by the most careful examination, detect anything abnormal except the thickening and condensation of the tissues investing the gland, before alluded to.

The first peculiarity of this case seems to me to be its mode of origin. The patient had no motive for deceit, and stated repeatedly in the clearest manner, that there had been nothing the matter with him before the time specified; no ecchymosis or mark of contusion was discoverable, and the inflamed state of the skin could be readily accounted for, either by its tension or by its contiguity to the tunica vaginalis. Mr. Curling, whose article on hæmatocele in his work on Diseases of the Testis is the fullest I have met with, says, that it generally results from a blow, or from straining on the part of the patient, unless it supervenes upon a hydrocele; in which latter case it may be due to the rupture of a vessel, or to a wound of the testicle or spermatic artery by the trocar, in the operation of tapping. Scarpa's case, alluded to by Mr. C. (Am. ed., p. 184), is given in full in his Treatise on Hernia, translated by Wishart; it is an instance of very honourable candour in the confession of a failure. Against the idea of a previously existing hydrocele in the case I have related, are the facts of the denial of the patient, the small amount of serum in the liquid evacuated (not more than should normally correspond to the amount of coagulum), and the inflammation set up, which would hardly have been caused by so small an effusion of serum in the sac as there must have been if there were any at all. If, however, there had been a small hydrocele, we may readily imagine that, perhaps, in moving upon the bench a fold of the tunica vaginalis might have been pinched up, and thus a rupture of some vessel have occurred.

Nélaton' speaks of spontaneous hæmatocele as a very rare affection. Erichsen's mentions a case of three years' standing; but does not state distinctly that it was not originally a hydrocele. Sir Astley Cooper's mentions eight cases of the disease, one of 17 years' duration, ascribed to a blow; the rest were all hydro-hæmatoceles. In 1856, while resident in the Pennsylvania Hospital, I saw a very large tumour, supposed to be a hydrocele with thickened walls, tapped by Dr. Peace; the liquid evacuated was dark red and grumous, and contained abundant crystals of cholesterine. This tumour had

Clinical Lectures on Surgery, reported by Atlee, p. 656.

² System of Surgery, Am. ed., p. 886.
3 Structure and Diseases of Testis.

been in existence about twenty years; the patient was a man 64 years of age, who had been admitted on account of frost-bite of both feet; he died of general exhaustion about four days after the operation, which was followed by extensive sloughing of the scrotum. Here the diagnosis was very evident; it was a case of hydro-hæmatocele. No other instances than the two now mentioned have come under my notice. Dr. Norris informs me that there have been but very few cases in the Hospital during the last twenty years; they all resulted from violence, and had existed some time; and in one of them very profuse suppuration demanded the free laying open of the sac. If, therefore, the case first related were one of pure and unmixed hæmatocele, it is unique in its recent date and in the absence of violence in its origin.

Another singular feature in the case in question is its tractability. Chelius and Sir Astley Cooper advise free incisions; Mr. Curling says, they are sometimes necessary; and all authors agree in the statement that suppuration is apt to ensue. Nélaton discountenances any tapping after the first, alleging that it is very apt to give rise to the formation of troublesome abscesses. Erichsen's case, before alluded to, is said to have recovered very well after tapping.

I would here call attention to the fact that the swelling passed over to the left of the raphé of the scrotum, thus showing plainly that it was due to effusion into the cavity of the tunica vaginalis; for this would not have occurred had the injury been confined to the tissues outside of that sac, and the concomitant symptoms were not sufficiently severe to warrant any suspicion of the testicle alone being concerned. In tuberculous or malignant affections, or in any others which give rise to adhesion between the gland and the skin, the raphé itself would be displaced one way or the other.

It was before stated that the tunica vaginalis was very evidently thickened and roughened; the same is mentioned by Sir A. Cooper as having been observed by him in several cases. M. Gosselin has published a very interesting memoir, illustrated by seven cases, upon this thickening of the tunica vaginalis in hydrocole and hematocole. He ascribes it to the formation of false membranes, which may be either thin and well-organized, or thick and bark-like; they are connected with the subjacent membrane by loose and easily-detachable cellular tissue, are often apparently fibrous or fibro-cartilaginous in texture, and may even become the seat of calcarcous deposits. He has reference, however, to old-standing cases; in the one I have given, the thickening was probably in the first place from coagulated blood, and was rendered permanent by the coagula so deposited becoming organized, and adherent first to the surface of the serous sea and then to one another; the sac being converted into a thick membrane without any central cavity, much as in the radical cure of an ordinary hydrocele.

Arch. Gen. de Med., Sept., 1851, et seq.